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TUSKEGEE NORMAL AND INDUSTRIAL INSTITUTE
TUSKEGEE INSTITUTE, ALA.

WHITE AND COLOR WASHING WITH NATIVE CLAYS FROM MACON COUNTY, ALABAMA

BY GEORGE W. CARVER, M. S. AGR.

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White and Color Washing with Native Clays from Macon County, Alabama

— *By* —

George W. Carver, M. S. Agr.

The Tuskegee Experiment Station

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BULLETIN NO. 21 SEPTEMBER, 1911

White and Color Washing with Native Clays from Macon County, Alabama

G. W. CARVER, M. S. Agr. Dir.

Of the many attractive features of our beautiful county, I think there is possibly none that elicit such universal admiration and praise as the vast deposits of multi-colored clays, ranging from snow-white, through many gradations, to the richest Sienna and Indian reds on the one hand, and from the deepest yellow ochre to the palest cream tintings on the other.

We have never looked upon our county as possessing vast mineral wealth; nevertheless, this is true, in her rich deposits of clay.

It is well understood that brick of superior quality and richness of color can be made. Now and then a jug factory springs up here and there, makes a few wagon-loads of jugs, churns, jars, crocks, vases, and flower pots, sells them out and disappears as mysteriously as it came; thus, slowly but surely, the value of these splendid clay deposits becomes known.

The materials for the manufacture of pressed brick, drain pipe, pottery, and fine kaolin wares are here in abundance.

WHITE WASHES AND KALSOMINES

One of the most unique and valuable uses to which they can be put is that of color-washing (kalsomining) of the interior of dwelling houses, schoolhouses, etc. Almost endless combinations can be made; they are bewitchingly beautiful and attractive. Below are a few of the most striking and pleasing cambinations:

PREPARATION OF THE CLAY

For white and color washing there are only two classes of clays to which we need to give attention; viz.: very sandy, and those practically free from sand. Of the latter class all that is necessary in its preparation is to thoroughly dissolve it in hot or cold water, making it of the same consistency as good white-wash, and apply it to rough unfinished walls in the same manner.

SANDY CLAY

The sand is easily removed in the following ways:

(a) Sift the pulverized clay through a fine sieve or a piece of coarse cloth.

(b) Stir the pulverized clay thoroughly into a vessel partly filled with water; let stand two minutes. The sand and gravel will sink to the bottom, and the water, with its suspended clay particles, can be poured off.

(c) Take a coarse bag, something like a flour sack; put half a gallon or so of the pulverized clay into it; dip this repeatedly into a vessel of water until the clay has been washed out. The sand in the bag may be thrown away and a fresh batch taken and treated in the same way until a sufficient quantity to suit your purpose has been gotten out.

Dressed lumber and hard-finished plastering do not take the color well. All such surfaces must be sized and prepared exactly the same as for kalsomining. On any surface where one does not want it to rub off, it may be fixed by the following methods:

METHOD I.

For every gallon of color-wash, stir in a pint of glue size (glue that has been dissolved in water until it becomes the consistency of mucilage).

METHOD II.

To every gallon of color-wash, stir in a pint of well-boiled starch or flour paste, being sure there are no lumps in it.

METHOD III.

For every gallon of color-wash, stir in a quart of thoroughly boiled sweet milk from which all the cream has been taken.

METHOD IV.

Boil a pound of rice in two gallons of water until a smooth paste is formed; strain through a cloth, and use the water the same as any other sizing.

COMBINATIONS.

No. 1.

Ceiling: Yellow or cream.
Border: Dark red.
Walls: Pink.

No. 2.

Ceiling: White.
Border: Yellow, Pink, or green.

Walls: Yellow

No. 3.

Ceiling: Blue.
Border: Yellow, green, or pink.
Walls: White or grey.

Note—The blue may be made by stirring in a little laundry or Prussian blue into the white clay until the desired shade is reached. The green may be made by stirring the blue into the yellow.

No. 4.

Ceiling: Pink.
Border: Yellow.
Walls: Dark salmon red.

No. 5.

Ceiling: Rose pink.
Border: White.
Walls: Light blue.

No. 6.

Ceiling: Purple.
Border: White or dark red.
Walls: Deep yellow, cream, or white.

No. 7.

Ceiling: White, pink, blue, or grey.
Border: Yellow or dark red.
Walls: Green.

No. 8.

Ceiling: Tinted pink or cream.
Border: Yellow, dark-red, or green.
Walls: Salmon red.

No. 9.

Ceiling: White, pink, blue, or cream.
Border: Chocolate.
Walls: White, pink, or grey.

No. 10.

Ceiling: Pink.
Border: Yellow.
Walls: Chocolate.

The above are only a few of the almost limitless number of pretty combinations that will suggest themselves to the artistic mind, such as the shading and blending of colors, checkered, lined, and spotted borders, etc., etc.

(a) This little pamphlet is designed primarily to aid the farmer in tidying up his premises, both in and outside, making his sur-

roundings more healthful, more cheerful, and more beautiful, thus bringing a joy and a comfort into his home that he has not known heretofore, and at practically no expense.

(b) It is further hoped that every school-teacher will take pride in fitting up his school room in some one of the above combinations, and will teach each pupil how to select the clay and prepare it.

Any of the above colors may be changed by adding a little bit of artificial coloring matter to them; e. g., green may be had in any shade by adding a little commercial green to the white clay; a deeper red by adding a little commercial red to the red clay, etc.

I feel safe in making the following assertion: That anyone becoming acquainted with the use of these clays will at once see their great value, and will use them freely and refuse to use any other as long as they can be had.

OUTSIDE WORK

Several of the colors are suitable for outside work; the white may be used instead of whitewash made with lime.

The red colors, when simply mixed with water and spread on rough surfaces, stick almost like paint and improve the looks of the building, or whatever it is put on.

Several years ago a gentleman took some red clay, beat it up with a mallet, mixed it with linseed oil and painted two houses with it in Notasulga. It looks very well yet, and if you were not told it was clay you certainly would never suspect it.

The light-colored clays are more on the order of lime, and do not stick so tenaciously.

For outside work do not stripe and border, as they are likely to run together and look ugly after the first rain.

GEORGE W. CARVER, M. S. Agr.
Director Department of Research and Experiment Station.

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